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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

In the Matter of:

AlliedSignal, Inc.

Detroit Coke Incorp

Former ~~Allied Chemical Corporation~~ Facility MDEQ Reference No.: AOC-ERD-[yr.]-[#]

7819 and ? West Jefferson Avenue

Detroit, Wayne County

Proceeding under Sections 20119 and 20134(1) of Part 201 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

**ADMINISTRATIVE ORDER BY CONSENT
FOR RESPONSE ACTIVITY**

US EPA RECORDS CENTER REGION 5



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ADMINISTRATIVE ORDER BY CONSENT FOR RESPONSE ACTIVITY
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I. JURISDICTION

This Administrative Order by Consent ("Order") is entered into voluntarily by and between the Michigan Department of Environmental Quality ("MDEQ"), Jennifer M. Granholm, Attorney General for the State of Michigan, and AlliedSignal, Inc. (AlliedSignal), pursuant to the authority vested in the MDEQ and the Department of Attorney General by Sections 20119 and 20134(1) of Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, MCL 324.20101 et seq., MSA 13A.20101 et seq. This Order concerns the performance by AlliedSignal of certain response activities at the former Detroit Coke Facility, Wayne County, Michigan.

II. DENIAL OF LIABILITY

The execution of this Order by AlliedSignal is neither an admission or denial of liability with respect to any issue dealt with in this Order nor an admission or denial of any factual allegations or legal determinations stated or implied herein.

III. PARTIES BOUND

3.1 This Order shall apply to and be binding upon AlliedSignal and the State and their successors and assigns. No change in ownership or corporate or legal status of AlliedSignal, including, but not limited to, any transfer of assets or of real or personal property, shall in any way alter AlliedSignal's responsibilities under this Order.

3.2 AlliedSignal shall provide the MDEQ with written notice prior to the transfer of ownership of part or all of the Facility and shall provide a copy of this Order to any subsequent owners or successors prior to the transfer of any ownership rights. AlliedSignal shall comply with the requirements of Section 20116 of the NREPA, MCL 324.20116.

3.3 AlliedSignal shall provide a copy of this Order to all contractors, subcontractors, laboratories and consultants that are retained to conduct any portion of the response activities performed pursuant to this Order within three (3) calendar days of the effective date of such retention.

3.4 Notwithstanding the terms of any contract that AlliedSignal may enter with respect to the performance of response activities pursuant to this Order, AlliedSignal is responsible for compliance with the terms of this Order and shall ensure that such contractors, subcontractors, laboratories and consultants perform all response activities in conformance with the terms and conditions of this Order.

3.5 The signatories to this Order certify that they are authorized to execute and legally bind the parties they represent.

IV. STATEMENT OF PURPOSE

haz substance
✓
haz waste.
In entering into this Order, it is the mutual intent of the Parties: (a) that AlliedSignal will conduct a Remedial Investigation *in accord w/ statute* to determine the nature, extent and impact of environmental contamination and any threat to the public health, safety or welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants from the Facility; (b) that AlliedSignal will implement the MDEQ-approved Interim Response Activities Work Plan for the Detroit Coke Property; (c) that AlliedSignal will conduct a feasibility study to determine and evaluate alternatives for remedial action to prevent, mitigate, abate, or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants from the Facility; (d) that AlliedSignal will develop and submit to the MDEQ an approvable, detailed plan for the selected remedial action for the Facility; (e)

implement an MDEQ-approved remedial action plan for the Facility; (f) that AlliedSignal will reimburse the State for past and future response activity costs as described in Section XX (Reimbursement of Costs); and (g) to minimize litigation.

V. DEFINITIONS

5.1 "AlliedSignal" means AlliedSignal, Inc. and its successors and assigns.

5.2 "Detroit Coke Property" means the property located at 7819 West Jefferson Ave., Detroit, MI, and described in the legal description provided in Attachment A.

5.3 "ERD" means the Environmental Response Division of the MDEQ and its successor entities.

5.4 Former Allied Chemical Corporation Facility or "Facility" means the Detroit Coke Property identified in Attachment A, the Yellow Freight Property identified in Attachment B, and any area, place, or property where a hazardous substance, which originated at the Detroit Coke Property or Yellow Freight Property and is present at concentrations that exceed the requirements of Section 20120a(1)(a) or (17) of the NREPA, MCL 324.20120a(1)(a) or (17), or the cleanup criteria for unrestricted residential use under Part 213 of the NREPA, has been released, deposited, disposed of, or otherwise comes to be located.

5.5 "IRWP" means the Interim Response Activity Work Plan for Redevelopment of the Detroit Coke Property, as approved by the MDEQ and found in Attachment C.

5.6 "MDEQ" means the Michigan Department of Environmental Quality, its successor entities, and those authorized persons or entities acting on its behalf.

5.7 "Oversight Costs" means costs that are related to the State's oversight, enforcement, monitoring, and documentation of compliance with this Order. Oversight Costs may include costs incurred to: monitor response activities at the Facility; observe and comment on field activities; review and comment on Submissions; collect and evaluate samples; purchase equipment and supplies to perform monitoring activities; attend and participate in meetings; prepare cost reimbursement documentation; and otherwise enforce, monitor and document compliance with this Order.

5.8 "Parties" means AlliedSignal, Inc. and the State.

5.9 "Past Response Activity Costs" means those costs incurred and paid by the State prior to **[Insert the agreed upon date(s): a date picked by parties, the effective date of the Order, or the dates set forth in the attached Final Summary Report (Attachment ____)]**.

5.10 "RAP" means a remedial action plan that satisfies the requirements of Sections 20118, 20120a and 20120b of the NREPA, and other relevant provisions of Part 201 and its administrative rules.

5.11 The terms "State" and "State of Michigan" mean the Attorney General and the Michigan Department of Environmental Quality, and any authorized representatives acting on their behalf.

5.12 "Submissions" means all plans, reports, schedules and submittals required by this Order.

5.13 "Yellow Freight Property" means the property located at ? and described in the legal description provided in Attachment B.

5.14 Unless otherwise stated herein, all terms used in this document, which are defined in Part 3 of the NREPA, MCL 324.301, Part 201 of the NREPA, MCL 324.20101, et seq., or the Part 201 Rules, 1990 AACSR 299.5101, et seq., shall have the same meaning in this document as in Parts 3 and 201 of the NREPA and the Part 201 Rules.

VI. FINDINGS OF FACT AND DETERMINATIONS

The State makes the following Findings of Fact and Determinations.

6.1 The Facility is located at 7819 and ? Jefferson Ave., Detroit, Wayne County, Michigan. The Facility is at the confluence of the Rouge and Detroit Rivers. Zug Island is across the Rouge River from the Facility to the west. The area is generally heavy industrial.

6.2 Allied Chemical Corporation, a predecessor to AlliedSignal, began coking operations at the Facility in about 1910. AlliedSignal and its predecessors operated at the Facility until 1980?, when the Detroit Coke Property was sold to Detroit Coke and the Yellow Freight Property was sold to? Wastes, including tars and other petroleum by-products, from the coal coking operation were disposed on the ground at the Facility.

6.3 Three injection wells, permitted under the United States Environmental Protection Agency's (USEPA) Underground Injection Control Program (UIC), were operated by Detroit Coke on the Detroit Coke Property. Waste ammonia liquor and stormwater have been disposed of in these wells. One UIC-permitted well was plugged in June 1995. Permits for the remaining two injection wells have a condition to comply with Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) requirements under the authority of the USEPA UIC and RCRA Programs.

6.4 Detroit Coke Corporation discontinued its coking operations in late 1991.

6.5 When it appeared that the Detroit Coke Property had tax-reverted to the state, the City of Detroit became interested in the redevelopment of the Detroit Coke Property. The Detroit Coke Property is located in a Renaissance Zone. To facilitate its redevelopment, the MDEQ performed some limited investigation to assess the type and extent of contamination on the Detroit Coke Property.

6.6 AlliedSignal notified the state that the company had a mortgage interest in the Detroit Coke Property. Following receipt of a notice by the state, AlliedSignal redeemed the Detroit Coke Property, placing it back into Detroit Coke Corporation's ownership.

6.7 AlliedSignal gained ownership of the Detroit Coke Property on March 18, 1999 through a Quit Claim Deed.

6.8 In the meantime, a developer has expressed interest in redeveloping the Detroit Coke Property. This settlement is, in part, intended to assist in the redevelopment.

6.9 The State and USEPA entered into a Memorandum of Understanding (MOU) to facilitate redevelopment of the Detroit Coke Property. Based on the MOU, USEPA will remove the RCRA CA requirements from the UIC permits and transfer the lead for oversight of the Detroit Coke Property to the MDEQ after MDEQ and AlliedSignal enter into an enforceable order to remediate the Detroit Coke Property. The enforceable order must require AlliedSignal to perform a remediation that complies with the provisions of Part 201 of the NREPA and the MDEQ's remediation program pursuant to Part 201 of the NREPA.

6.10 AlliedSignal agrees to implement an interim response activity on the Detroit Coke Property that will aid in its redevelopment. These activities include removal of the existing aboveground tanks, including their contents, demolition of any remaining buildings, excavation

and disposal of liquid coal tar from certain areas, installation of product recovery wells, and design and construction of a slurry wall surrounding the source area. AlliedSignal shall also address the groundwater contamination outside the slurry wall, and place land and resource use restrictions on the Detroit Coke Property. AlliedSignal also agrees to implement a RAP for the Facility on a MDEQ-approved schedule, that will involve a remedial investigation and design and implementation of a remedial action at the Facility, including the Yellow Freight Property and any other area where hazardous substances from the Facility have come to be located.

6.11 The former Allied Chemical Corporation Facility is a "facility" as that term is defined in Section 20101(l)(o) of the NREPA.

6.12 Free phase product, benzene, ammonia, cyanide, naphthalene and other polynuclear aromatic hydrocarbons (PAHs) and high pH levels are some of the "hazardous substance(s)", as that term is defined in Section 20101(1)(t) of the NREPA, that are present at the Facility.

6.13 Tars and free phase liquids, among other substances, are waste products from the historical manufacture of coke that have been released at the Facility. The presence of these waste products on the surface and subsurface has resulted in high levels of hazardous substances in the soils and groundwater at the Facility. Contaminated groundwater is migrating into the Rouge and Detroit Rivers. This condition constitutes a "release or threatened release" within the meaning of Sections 20101(1)(bb) and 20101(1)(ii) of the NREPA.

6.14 The PAHs in soils are above direct contact values as established by Part 201 of the NREPA. Benzene concentrations in groundwater pose an indoor air concern. The release or threatened release of hazardous substances at or from the Facility may pose an imminent and substantial endangerment to the public health, safety, or welfare, or the environment within the meaning of Section 20119 of the NREPA.

6.15 AlliedSignal, Inc. is a "person" as that term is defined in Section 301(g) of Part 3 of the NREPA.

6.16 Historical management practices related to the coking of coal by AlliedSignal and its predecessors resulted in releases of contaminants at the Facility. Therefore, AlliedSignal was an operator who is responsible for an activity causing a release or threat of release at the Facility pursuant to Section 20126(1)(b) of the NREPA.

6.17 In order to protect public health, safety, and welfare, and the environment, and to abate the danger or threat, it is necessary and appropriate that response activities be undertaken. The response activities that must be performed at the Facility are specified in Section VII (Implementation of Response Activities) of this Order, and the IRWP attached hereto as Attachment C.

On the basis of the Findings of Fact, the MDEQ and the Attorney General make the determination that AlliedSignal will properly implement and expedite effective response activities required by this Order and that this Order is in the public interest and will minimize litigation.

BASED ON THE FOREGOING FACTS AND DETERMINATIONS, THE MDEQ, THE ATTORNEY GENERAL AND ALLIEDSIGNAL HEREBY AGREE, AND IT IS HEREBY ORDERED THAT:

VII. IMPLEMENTATION OF RESPONSE ACTIVITIES

7.1 This Order requires AlliedSignal to implement the IRWP, a remedial investigation/feasibility study (RI/FS) of the portion of the Facility not addressed by the

interim response, and a RAP for the Facility. The objective of these response activities is to remediate the Facility in a manner that is consistent with Section 20118 of the NREPA, achieves the cleanup criteria that complies with Section 20120a of the NREPA, and meets the requirements of Section 20120b of the NREPA.

7.2 AlliedSignal shall implement the MDEQ-approved IRWP in Attachment C in accordance with the approved schedule provided in the IRWP.

7.3 Within thirty (30) days of the effective date of this Order, AlliedSignal shall submit to the MDEQ a Quality Assurance Project Plan (QAPP), which describes the quality control, quality assurance, sampling protocol and chain of custody procedures that shall be implemented in carrying out the tasks required by this Order. The QAPP shall be developed in accordance with the U.S. EPA's "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans" QAMS-005/80, EPA-600/4-83-004, NTIS PB 83-170514, and the MDEQ QAPP Guidance dated February 1993.

7.4 Within thirty (30) days of the effective date of this Order, AlliedSignal shall submit to the MDEQ a Health and Safety Plan developed in accordance with the standards promulgated pursuant to the National Contingency Plan, 40 CFR 300.150, the Occupational Safety and Health Act of 1970, 20 CFR 1910.120, and the Michigan Occupational Safety and Health Act. The Health and Safety Plan is not subject to the MDEQ's approval as required by Section XV (Submissions and Approvals) of this Order.

7.5 Within ten (10) days of receipt of MDEQ-approval of the IRWP final report, AlliedSignal shall submit to the MDEQ for review and approval a proposed restrictive covenant for the Detroit Coke Property that requires the appropriate land and resource use restrictions to assure the effectiveness and integrity of any containment, exposure barrier or other remedial measure taken pursuant to the IRWP and reliably restricts exposure to

hazardous substances. Within 21 days of MDEQ-approval of the restrictive covenant for the Detroit Coke Property, AlliedSignal shall record or have recorded the approved restrictive covenant with the Wayne County Register of Deeds. AlliedSignal shall provide a true copy of the recorded restrictive covenant to the MDEQ within ten (10) days of AlliedSignal's receipt of a copy from the Register of Deeds. The copy provided to the MDEQ shall include the liber and page number.

7.6 AlliedSignal shall provide a copy of the MDEQ-approved restrictive covenant for the Detroit Coke Property to each easement holder of record at the Detroit Coke Property, within thirty (30) days of MDEQ-approval of the restrictive covenant.

7.7 Within _____, AlliedSignal shall submit to the MDEQ for review and approval an approvable work plan for the performance of an RI/FS of the portion of the Facility not addressed in the IRWP, including the Detroit Coke Property outside of the slurry wall and the Yellow Freight Property. The work plan shall include a description of the history and nature of operations at and site characteristics of the Facility. Within thirty (30) days of receiving the MDEQ's approval of the work plan, AlliedSignal shall implement the plan in accordance with the approved time schedule.

7.8 Within ninety (90) days of receiving the MDEQ's approval of the final RI/FS report, AlliedSignal shall submit to the MDEQ for review and approval a RAP that complies with the requirements of Part 201 and its administrative rules, including all the technical and administrative components for the cleanup category proposed pursuant to Sections 20120a and 20120b of the NREPA. Within thirty (30) days of receiving MDEQ approval of the RAP, AlliedSignal shall implement the RAP in accordance with the approved time schedule. AlliedSignal acknowledges that submittal of a RAP pursuant to Section 20120a(1)(b)-(j) and 20120a(2) of the NREPA, may involve additional administrative requirements as described in sections 20120b(2), (3) and (4) of the NREPA. All submittals pursuant to those administrative

requirements, which in combination constitute an MDEQ-approved RAP, shall become attachments to this Order and become an enforceable part of this Order.

7.9 If AlliedSignal chooses to submit a RAP pursuant to Section 20120a(1)(b)-(e) or Section 20120a(1)(f)-(j) or 20120a(2) of the NREPA, AlliedSignal shall record or have recorded either the MDEQ-approved notice of approved environmental remediation or restrictive covenant, as appropriate, with the Wayne County Register of Deeds within 21 days after the approval of the RAP by the MDEQ, or within 21 days after completion of construction of the remedial action, as appropriate. AlliedSignal shall provide a true copy of the recorded restrictive covenant to the MDEQ within ten (10) days of AlliedSignal's receipt of a copy from the Register of Deeds. The copy provided to the MDEQ shall include the liber and page number.

7.10 If AlliedSignal chooses to submit a RAP pursuant to Section 20120a(1)(b)-(j) or 20120a(2) of the NREPA, AlliedSignal shall perform the following activities within thirty (30) days of MDEQ-approval of the RAP:

- (a) Provide notice of the land use restrictions to the zoning authority of the local unit of government that includes the Facility;
- (b) Provide notice to each easement holder of record at the Facility that it constitutes a "facility" under Part 201 of the NREPA; and
- (c) Provide a copy of the MDEQ-approved restrictive covenant or notice of approved environmental remediation, as applicable, to each easement holder of record at the Facility.

If the notice required in this Paragraph is not sent within the required thirty (30)-day period, the MDEQ's approval of the RAP is void unless the lapse is corrected to the satisfaction of the MDEQ.

7.11 Within thirty (30) days after receipt of MDEQ approval of the RAP, AlliedSignal

shall submit a proposed plan and implementation schedule to the MDEQ for the removal or plugging of monitor wells. This plan shall identify monitor wells at or related to the Facility that will not be utilized for long term monitoring at the Facility and that will be abandoned. Upon receiving MDEQ approval, AlliedSignal shall properly remove or plug the monitor wells in accordance with the specifications set forth in ASTM Standard D 5299 (Standard Guide for Decommissioning Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities). AlliedSignal shall report to the MDEQ the status of the plugging and abandonment of monitor wells in the Progress Reports to be submitted pursuant to Paragraph 7.15 of this Order.

7.12 AlliedSignal shall, upon completion of all the response activities detailed in the RAP, including operation and maintenance and long-term monitoring, provide notice to and obtain approval from the MDEQ and implement the proper removal or plugging of all remaining monitor wells at or related to the Facility. Upon receiving MDEQ approval, AlliedSignal shall properly remove or plug the monitor wells in accordance with the specifications set forth in ASTM Standard D 5299 (Standard Guide for Decommissioning Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities). AlliedSignal shall report to the MDEQ the status of the plugging and abandonment of monitor wells in the Progress Reports to be submitted pursuant to Paragraph 7.15 of this Order.

7.13 Each work plan submitted to the MDEQ shall include: (a) a detailed description of the specific tasks to be conducted during the implementation of each work plan, including methodology, specifications, and sampling locations; (b) schedules for the implementation and completion of the work plan, including a beginning and ending date for each activity, and submission of a final report; and (c) a description of the nature and amount of waste materials that are expected to be generated during implementation of the work plan and the specific facilities that AlliedSignal proposes to use for the off-site transfer, storage, treatment or

disposal of those waste materials. AlliedSignal shall implement each work plan upon approval of each plan pursuant to the procedures provided for in this Order. The MDEQ shall be notified of any schedule change as soon as AlliedSignal is aware a schedule change is necessary to allow the MDEQ the opportunity to monitor for quality assurance. Upon MDEQ approval, each component of each work plan and approved modifications thereto shall be deemed incorporated into this Order and made an enforceable part of this Order.

7.14 Modification of the IRWP, RI/FS or RAP

(a) If the MDEQ determines that a modification to the response activities specified in the MDEQ-approved IRWP, RI/FS, or RAP is necessary to meet and maintain the performance standards described in Part 201 of the NREPA and its administrative rules, the MDEQ may require that such modification be incorporated into the IRWP, RI/FS or RAP. Alternatively, if the necessary modifications are extensive, the MDEQ may require AlliedSignal to submit a proposed plan to the MDEQ for review and approval. However, such modifications may only be required pursuant to this Paragraph to the extent that those modifications are consistent with the scope of the response activity objectives outlined in Paragraph 7.1.

(b) If AlliedSignal objects to any modification determined by the MDEQ to be necessary pursuant to this Section, it may seek dispute resolution pursuant to Section XIX (Dispute Resolution). The IRWP, RI/FS or RAP shall be modified in accordance with the final resolution of the dispute.

(c) AlliedSignal shall implement any work required by any modification incorporated into the IRWP, RI/FS or RAP in accordance with this Section.

(d) Nothing in this Section shall be construed to limit the MDEQ's authority to require performance of further response activities as otherwise provided in this Order.

7.15 Progress Reports

AlliedSignal shall provide to the MDEQ Project Coordinator written monthly progress

reports regarding response activities and other matters at the Facility related to the implementation of this Order. These progress reports shall include: (a) a description of the activities that have been taken toward achieving compliance with this Order during the previous month; (b) a description of data collection and other activities scheduled for the next month; (c) all results of sampling and tests and other data received by AlliedSignal, its employees or authorized representatives during the previous month relating to the response activities performed pursuant to this Order; (d) a description of the nature and amount of waste materials that were generated and the name of the facilities that were used for the off-site transfer, storage, treatment or disposal of those waste materials; and (e) any other relevant information regarding other activities or matters at the Facility that affect or may affect the implementation of the requirements of this Order. The first monthly report shall be submitted to the MDEQ within sixty (60) days following the effective date of this Order and monthly thereafter until the issuance of the Certification of Construction of the Remedial Action pursuant to Section XXVI (Certifications). After issuance of the Certification of Construction of the Remedial Action, AlliedSignal shall provide to the MDEQ Project Coordinator written quarterly progress reports regarding response activities and other matters at the Facility related to the implementation of this Order until the issuance of the Certification of Completion of the Remedial Action. The Parties to this Order may request, based on the phase of work being conducted at the Facility or other relevant circumstances, an adjustment to the schedule for submittal of progress reports, provided that such modification of the schedule is agreed to in writing by both Project Coordinators.

7.16 When the MDEQ determines that the proposed RAP required pursuant to this Order is acceptable for public review, the proposed RAP shall be made available by the MDEQ for public comment for a period of not less than thirty (30) days. The dates and length of the public comment period shall be established by the MDEQ. Following the public review and comment period, the MDEQ may refer the proposed RAP back to AlliedSignal for revision pursuant to public comments and MDEQ comments. In addition, AlliedSignal shall

provide information for the responsiveness summary as required by the MDEQ. AlliedSignal also shall prepare all portions of a draft responsiveness summary specified by the MDEQ. The MDEQ will prepare the final responsiveness summary for the proposed RAP.

7.17 For as long as AlliedSignal owns all or a portion of the Facility, AlliedSignal shall pay all real estate taxes and assessments levied against the Facility by local taxing authorities prior to the time such taxes or assessments would become a lien on the Facility. Nothing contained herein should be considered to preclude AlliedSignal from contesting the amount of such taxes or assessments or the equalized value of the Facility, or any portion thereof.

7.18 Nothing in this AOC shall affect the duties and obligations AlliedSignal may have with respect to permits or other governmental approvals or waive AlliedSignal's duties and obligations under other applicable federal or state laws.

VIII. FINANCIAL ASSURANCE MECHANISM

8.1 AlliedSignal shall provide a financial assurance mechanism (FAM) which is adequate to assure AlliedSignal's ability to pay for operation and maintenance, oversight, monitoring and other costs determined by the MDEQ to be necessary to assure the effectiveness and integrity of the remedial action implemented pursuant to the IRWP and RAP, as applicable, at the Facility.

8.2 The parties have agreed that a FAM in the amount of _____ dollars (\$?.00) is necessary to satisfy AlliedSignal's financial obligations for the initial thirty (30) year period that this Order is in effect. This amount reflects the estimated costs for implementation of the operation and maintenance (O&M) plan as set forth in the IRWP and for oversight, monitoring and other costs necessary to assure the

effectiveness and integrity of the remedial action pursuant to the IRWP at the Facility for this initial thirty (30) year period. AlliedSignal has submitted the necessary information to demonstrate that it meets the MDEQ's requirements for using the Financial Test (Attachment D) and the MDEQ agrees that AlliedSignal may use the financial test as its FAM for the first year that this Order is in effect.

8.3 The parties agree that the amount of the FAM and the corresponding financial test shall be modified based upon the requirements of the RAP as part of the submission of the RAP for the Facility. The modification and associated documents shall be reviewed by the MDEQ in conjunction with the review and approval process set forth in Paragraphs 15.4-15.6 of this Order. Upon approval of the RAP by the MDEQ, the RAP, the final approved FAM and associated documents shall become attached to and made an enforceable part of this Order.

8.4 Within sixty (60) days of the end of AlliedSignal's next fiscal year (_____, 199_) and of the end of each succeeding fiscal year, AlliedSignal shall submit to the MDEQ either the necessary forms and supporting documents to demonstrate to the satisfaction of the MDEQ that AlliedSignal can continue to meet the financial test requirements as defined in Attachment D or, if AlliedSignal can no longer meet those requirements, a proposal for an alternate FAM to satisfy its financial obligations with respect to this Order.

8.5 Any alternate FAM established pursuant to this Order shall be secured in an amount that reflects the estimated costs for implementation of the operation and maintenance (O&M) plan as set forth in the IRWP and RAP, whichever is applicable, and for oversight, monitoring and other costs necessary to assure the effectiveness and integrity of the remedial action at the Facility for the next thirty (30) year period. Any alternate FAM must be written and executed in accordance with the forms and

procedures prescribed by the MDEQ and shall include the type of FAM, the amount of funds to be secured, and a procedure for the continued review and approval of that FAM by the parties, if appropriate. Submittals provided to MDEQ pursuant to this paragraph shall be reviewed and approved or disapproved in accordance with the procedure set forth in paragraphs 15.1-15.3 (Submissions and Approvals Section) of this Order. Upon receipt of approval by the ERD Chief, AlliedSignal shall implement the alternate FAM within fifteen (15) days.

8.6 Within sixty (60) days after each succeeding five (5) year anniversary date of the end of AlliedSignal's fiscal year, in addition to submitting the information required in paragraph 8.4, AlliedSignal also shall submit to the MDEQ the following: (1) an updated O&M plan; (2) if necessary, a plan for other additional response activities needed to assure the effectiveness and integrity of the remedial action as set forth in the IRWP or RAP, whichever is applicable; and (3) an updated cost estimate for implementing the O&M Plan, and any other necessary response activities, and for oversight, monitoring and other costs for the next thirty (30) year period, including documentation of the actual costs for those activities for the previous five (5) year period. The submittal shall include a certification that the information is true and correct and the signature of an officer representing AlliedSignal. Submittals provided to the MDEQ pursuant to this paragraph shall be reviewed and approved and/or disapproved in accordance with the procedure set forth in paragraphs 15.1-15.3 of this Order.

8.7 If, at any time, AlliedSignal or the MDEQ identifies the need for additional response activity to assure the effectiveness and integrity of the remedial action as provided for in the IRWP or RAP, AlliedSignal shall submit to the MDEQ for review and approval a proposed plan and schedule, and an estimate of the costs for implementing those response activities. Those items shall be submitted within thirty (30) days of identifying the need for the additional response activities. If required by the MDEQ,

AlliedSignal also shall submit updated financial test information to determine whether it meets the financial test requirements as set forth in Attachment D in view of the additional costs it will incur to implement those response activities. Upon receipt of the MDEQ's approval, AlliedSignal shall implement additional response activities in accordance with the approved plan and time schedule.

8.8 If at any time the MDEQ reasonably believes that AlliedSignal no longer meets the requirements for the financial test as specified in Attachment D, the MDEQ may require reports of financial condition at any time from AlliedSignal, in addition to the information specified in Attachment D, and/or require AlliedSignal to submit updated financial test information to determine whether it continues to meet the financial test criteria. If the MDEQ finds that AlliedSignal no longer meets the requirements for the financial test, AlliedSignal shall provide a proposal for an alternate financial assurance mechanism within thirty (30) days after notification of such finding. The parties shall then proceed as set forth in paragraph 8.5.

IX. SAMPLING AND ANALYSIS

9.1 All sampling and analysis conducted to implement this Order shall follow the methodologies prescribed by the Part 201 Rules and guidance provided by the MDEQ on sampling locations, parameters, detection limits and analytical methods.

9.2 AlliedSignal, or its consultants or subcontractors, shall provide the MDEQ ten (10) days notice prior to any sampling activity undertaken pursuant to this Order to allow the ERD Project Coordinator, or his or her authorized representative, to take split or duplicate samples and to observe the sampling procedures. In circumstances where ten (10) days notice is not possible, AlliedSignal, or its consultants or subcontractors, shall provide notice of the planned sampling activity as soon as possible to the ERD Project Coordinator and explain why earlier

notification was not possible. If the ERD Project Coordinator concurs with the explanation provided, AlliedSignal may forego the 10-day notification period.

9.3 AlliedSignal shall provide the MDEQ with the results of all environmental sampling, treatment system sampling, underground storage tank (UST) system tightness tests, aquifer pump tests and other data generated in the performance or monitoring of any requirement under this Order, Parts 111, 115, 201, 211 or 213 of the NREPA, or other relevant authorities. Said results shall be included in Progress Reports as set forth in Paragraph 7.15.

9.4 AlliedSignal shall assure that the MDEQ and its authorized representatives are allowed access, for the purpose of quality assurance monitoring, to any laboratory that is used by AlliedSignal in implementing this Order.

X. PROJECT COORDINATORS AND COMMUNICATIONS/NOTICES

10.1 Each party shall designate a Project Coordinator. The MDEQ's Project Coordinator is Edward Novak. AlliedSignal's Project Coordinator is _____. Whenever notices are required to be given or Progress Reports, information on the collection and analysis of samples, sampling data, work plan submittals, approvals, or disapprovals or other technical submissions are required to be forwarded by one party to the other party under this Order, or whenever other communications between the parties are needed, such communications shall be directed to the Project Coordinators at the below listed addresses. All documents required to be submitted to MDEQ pursuant to this Order shall reference the Facility name and MDEQ reference number of this Order, and shall simultaneously be provided to USEPA at the address provided in this Paragraph. If any party changes its designated Project Coordinator, the name, address and telephone number of the successor shall be provided to the other party, in writing, as soon as practicable.

As to MDEQ:

A. For Record Retention pursuant to Section XIV (Record Retention/Access to Information) and all financial matters pursuant to Section VIII (Financial Assurance Mechanism)]:

Chief, Compliance and Enforcement Section
Environmental Response Division
Michigan Department of Environmental Quality
P.O. Box 30426
Lansing, MI 48909
Telephone: 517-373-7818_
FAX: 517-373-2637

(Via courier)
300 South Washington Square
Lansing, MI 48933

B. For all payments (including stipulated penalties) pertaining to this Order:

Revenue Control Unit
Michigan Department of Environmental Quality
300 South Washington Square, Suite 457
P.O. Box 30657
Lansing, MI 48909-8157

To ensure proper credit, all payments made pursuant to this order must reference the Former Allied Chemical Company Facility, the MDEQ Reference No. AOC-ERD- [yr.]-[#], and the ERD Account Number _____. [NOTE: Obtain Account Number from C&E staff]

C. For all other matters pertaining to this Order:

Edward Novak, Project Coordinator
Environmental Response Division
Southeast Michigan District, Detroit Office
Michigan Department of Environmental Quality
300 River Place, Suite 3600
Detroit, MI 48207
Telephone: 313-392-6480

Fax: 313-392-6488

Notices shall also go to:

Allen Melcer
United States Environmental Protection Agency
Region 5
77 W. Jackson Blvd. (WU-16J)
Chicago, IL 60604-3590
Phone: 312-886-1498
Fax: 312-886-0747

As to AlliedSignal:

_____ [Name]
_____ [Address]
_____ [Phone No.]
_____ [Fax No.]

10.2 AlliedSignal's Project Coordinator shall have primary responsibility for overseeing the implementation of the response activities and other requirements specified in this Order.

10.3 The MDEQ may designate other authorized representatives, employees, contractors, and consultants to observe and monitor the progress of any activity undertaken pursuant to this Order.

XI. ACCESS

11.1 Upon the effective date of this Order, the MDEQ, its authorized employees, agents, representatives, contractors and consultants, shall have an irrevocable right-of-access at all reasonable times to the Facility and any property to which access is required for the implementation of this Order, to the extent access to the Facility is owned, controlled by, or available to AlliedSignal. The MDEQ will provide reasonable notice and present proper credentials when gaining access. Access under this Order is for the purpose of conducting any

activity authorized by this Order or otherwise fulfilling any responsibility under federal or State law with respect to environmental conditions at the Facility, including, but not limited to:

- (a) Monitoring the response activities or any other activities taking place pursuant to this Order at the Facility;
- (b) Verifying any data or information submitted to the MDEQ;
- (c) Conducting investigations relating to contamination at or near the Facility;
- (d) Obtaining samples;
- (e) Assessing the need for or planning or implementing response activities at or near the Facility;
- (f) Assessing compliance with requirements for the implementation of monitoring, operation and maintenance, or other measures necessary to assure the effectiveness and integrity of a remedial action;
- (g) Inspecting and copying non-privileged records, operating logs, contracts or other documents; or
- (h) Communicating with AlliedSignal's Project Coordinator or other personnel, representatives, or consultants for the purpose of assessing compliance with this Order.

11.2 To the extent that the Facility, or any other area where the response activities are to be performed by AlliedSignal under this Order, is owned or controlled by persons other than AlliedSignal, AlliedSignal shall use its best efforts to secure from such persons access for the parties and their authorized employees, agents, representatives, contractors and consultants. AlliedSignal shall provide the MDEQ with a copy of each access agreement secured pursuant to this Section. For purposes of this Paragraph, "best efforts" includes, but is not limited to, reasonable compensation to the owner or taking judicial action to secure such access. If, after using its best efforts, AlliedSignal is unable to obtain access within the time provided in the scheduled of the MDEQ-approved Submission, AlliedSignal shall promptly notify the MDEQ.

11.3 AlliedSignal shall reserve for the MDEQ and persons implementing response

activities approved by the MDEQ and their authorized representatives the access provided under Sections XI (Access) and XIV (Record Retention/Access to Information) of this Order in any lease, purchase, contract or other agreement entered into by AlliedSignal which transfers to another party a right of control over the Facility or a portion of the Facility.

11.4 This Order does not restrict or limit any right that the MDEQ may have to enter the Facility to which access is required for the protection of the public health, safety or the environment pursuant to specific statutory or regulatory authority. Consistent with the MDEQ's responsibilities under federal or state law, the MDEQ and its authorized representatives shall use their best efforts to minimize interference and whenever possible employ efforts that are the least intrusive to the operations and commercial activities at the Facility. For purposes of this Paragraph, "best efforts" shall not require the MDEQ to incur any material cost increases in carrying out its responsibilities to protect the public health, safety or welfare or the environment.

11.5 Any person granted access to the Facility by AlliedSignal pursuant to this Order shall comply with all applicable health and safety laws and regulations.

XII. CREATION OF DANGER

If AlliedSignal, during the performance of response activities conducted pursuant to this Order, becomes aware of information concerning the occurrence of any event that causes a release or threat of release of a hazardous substance from the Facility or that poses or threatens to pose an imminent and substantial endangerment to on-site personnel or to the public health, safety, or welfare or the environment, AlliedSignal shall immediately undertake all appropriate actions to prevent, abate or minimize such release, threat, or endangerment and shall immediately notify the MDEQ's Project Coordinator or, in the event of his or her

unavailability, the Pollution Emergency Alerting System (PEAS, 1-800-292-4706). In such an event, any actions taken by AlliedSignal shall be in accordance with all applicable health and safety laws and regulations and with the provisions of the HASP. Within ten (10) days of notifying the MDEQ of such an event, AlliedSignal shall submit a written report setting forth the events that occurred and the measures taken and/or to be taken to mitigate any release, threat, or endangerment caused or threatened by the event and to prevent recurrence of such an event. Regardless of whether AlliedSignal notifies the MDEQ under this Section, if response activities undertaken under this Order cause a release or threat of release or pose or threaten to pose an imminent and substantial endangerment to on-site personnel or to public health, safety, or welfare or the environment, the MDEQ may: (a) require AlliedSignal to stop response activities at the Facility for such period of time as may be needed to prevent or abate any such release, threat or endangerment; (b) require AlliedSignal to undertake any actions that the MDEQ determines are necessary to prevent or abate any such release, threat or endangerment; or (c) undertake any actions that the MDEQ determines are necessary to prevent or abate such release, threat or endangerment. In the event that the MDEQ undertakes any action to abate such a release, threat or endangerment, AlliedSignal shall reimburse the State for all response activity costs lawfully incurred by the State. Payment of such costs shall be made in the manner provided in Section XX (Reimbursement of Costs).

XIII. COMPLIANCE WITH STATE AND FEDERAL LAWS

All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable or relevant and appropriate state and federal laws and regulations, including laws relating to occupational safety and health. Other agencies may also be called upon to review the conduct of response activities under this Order.

XIV. RECORD RETENTION/ACCESS TO INFORMATION

14.1 AlliedSignal and its representatives, consultants and contractors shall preserve and retain, during the pendency of this Order and for a period of ten (10) years after its termination, all records, sampling or test results, charts, and other documents relating to the release or threatened release of hazardous substances and the storage, generation, disposal, treatment or handling of hazardous substances at the Facility, and any records that are maintained or generated pursuant to any requirement of this Order. After the ten (10)-year period of document retention, AlliedSignal may seek the MDEQ's written permission to destroy the documents. In the alternative, AlliedSignal may make a written commitment, with the MDEQ's approval, to continue to preserve and retain the documents for a specified period of time, or AlliedSignal may offer to relinquish custody of all documents to the MDEQ. In any event, AlliedSignal shall obtain the MDEQ's written permission prior to the destruction of any documents. AlliedSignal's request shall be accompanied by a copy of this Order and sent to the address listed in Section X (Project Coordinators and Communications/Notices) or to such other address as may subsequently be designated in writing by the MDEQ.

14.2 Upon request, AlliedSignal shall provide to the MDEQ all documents and information within its possession, or within the possession or control of its employees, contractors, agents or representatives, relating to response activities at the Facility or to the implementation of the requirements of this Order, including, but not limited to, records regarding the collection and analysis of samples, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing forms, correspondence or other documents or information related to response activities. Upon request, AlliedSignal also shall make available to the MDEQ, upon reasonable notice, AlliedSignal's employees, contractors, agents or representatives with knowledge of relevant facts concerning the performance of response activities.

14.3 AlliedSignal may designate, in accordance with Section 20117(10) and (11) of the NREPA, information that AlliedSignal believes it is entitled to protect or keep confidential. If

no such claim accompanies the information when it is submitted to the MDEQ, the information may be made available to the public by the MDEQ without further notice to AlliedSignal. Information described in subsections 20117(11)(a)-(h) of the NREPA shall not be claimed as confidential or privileged by AlliedSignal. Information or data generated under this Order shall not be subject to Part 148 of the NREPA, MCL 324.14801 et seq.

XV. SUBMISSIONS AND APPROVALS

15.1 All Submissions required by this Order shall be delivered to the MDEQ in accordance with the schedule set forth in this Order. Prior to receipt of MDEQ approval, any report submitted to the MDEQ for approval shall be marked "Draft" and shall include, in a prominent location in the document, the following disclaimer: "Disclaimer: This document is a DRAFT document that has not received final acceptance from the Michigan Department of Environmental Quality ("MDEQ"). This document was prepared pursuant to a governmental Administrative Order. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ."

15.2 With the exception of the submittal of a RAP, upon receipt of any Submission relating to response activities, which is required to be submitted for approval pursuant to this Order, the MDEQ Project Coordinator shall in writing: (a) approve the Submission; (b) disapprove the Submission and notify AlliedSignal of the deficiencies in the Submission; or (c) approve the Submission with modifications. Upon receipt of a notice of approval or approval with modifications from the MDEQ, AlliedSignal shall proceed to take any action required by the Submission, as approved or as modified, and shall submit a new cover page and the modified pages of the plan marked "Final."

15.3 Upon receipt of a notice of disapproval from the MDEQ pursuant to Paragraph 15.2, AlliedSignal shall correct the deficiencies and resubmit the Submission

for approval within thirty (30) days, unless the notice of disapproval specifies a longer time period for resubmission. Notwithstanding a notice of disapproval, AlliedSignal shall proceed to take any response activity not directly related to the deficient portion of the Submission. If, upon resubmission, the Submission is not approved, the MDEQ shall so advise AlliedSignal and AlliedSignal shall be deemed to be in violation of this Order.

15.4 Within forty (40) days of receipt of the RAP or request for approval of a RAP that lacks any information necessary or required by the MDEQ to make a decision regarding RAP approval, the MDEQ will send AlliedSignal an "Insufficient Information RAP Letter". AlliedSignal then shall proceed as set forth in Paragraph 15.5. If the MDEQ, upon receipt of a RAP, determines that the submittal contains the information necessary to make a decision regarding approval of the RAP, within six (6) months the MDEQ will in writing: (a) approve the RAP or (b) deny approval of the RAP and provide AlliedSignal the reasons it was denied and the inadequacies that must be addressed to obtain approval. The MDEQ may not add additional items to this statement after it has been issued. Upon receipt of a notice of approval from the MDEQ, AlliedSignal shall proceed to take any action required by the RAP, as approved, and shall submit a new cover page marked "Final."

15.5 Within thirty (30) days of receipt of an Insufficient Information RAP Letter or receipt of a denial of approval of a RAP from the MDEQ, AlliedSignal shall correct the deficiencies identified in the MDEQ's written response and resubmit the RAP for approval. The time frame for resubmission may be extended by the MDEQ. If the RAP is not approved upon resubmission, the MDEQ shall so advise AlliedSignal, and AlliedSignal shall be deemed to be in violation of this Order.

15.6 A RAP will be deemed to be complete and to include the information necessary or required for the MDEQ to make a decision regarding RAP approval if AlliedSignal does not receive an "Insufficient Information RAP Letter" postmarked within forty (40) days of the date

the RAP was submitted. Thereafter, if the MDEQ fails within six (6) months from the date the RAP is received to approve or deny the RAP, the RAP shall be considered approved. The time frame for a decision may be extended by the mutual consent of the Parties.

15.7 Any Submission and attachments to Submissions required by this Order, upon approval by the MDEQ, are incorporated into this Order and are enforceable pursuant to the terms of this Order.

15.8 Any delay in the submittal of a Submission or noncompliance with a Submission or attachment to this Order shall subject AlliedSignal to penalties pursuant to Section XXI (Stipulated Penalties) or other remedies available to the State pursuant to this Order. Furthermore, if AlliedSignal does not comply with the provisions of section 20120b(3)(a)-(e) with respect to its implementation of the RAP or it allows those provisions to lapse, the MDEQ's approval of the RAP is void from the time of the lapse or violation, unless the lapse or violation is corrected to the satisfaction of the MDEQ. In the event the MDEQ's approval of the RAP becomes void, all other terms of this Order shall remain in full force and effect.

15.9 If AlliedSignal fails to correct a lapse or violation of its implementation of a response activity in an MDEQ-approved work plan or its schedule within thirty (30) days of written notification of such lapse or violation from the MDEQ, the MDEQ, at its option, may perform the response activities that AlliedSignal has failed to perform. However, the MDEQ is not required to provide thirty (30) days notice prior to undertaking response activities if those activities are determined to be necessary pursuant to Section XII (Creation of Danger) of this Order. AlliedSignal shall reimburse the State for costs the State incurs to perform those response activities within thirty (30) days of AlliedSignal's receipt of a cost summary report or the State shall be reimbursed in accordance with the terms and conditions of the Financial Assurance Mechanism for such work.

15.10 A finding of approval or approval with modifications shall not be construed to mean that the MDEQ concurs with all conclusions, methods, or statements in any Submission or warrants that the Submission comports with law.

15.11 No informal advice, guidance, suggestions or comments by the MDEQ regarding any Submission or any other writing submitted by AlliedSignal shall be construed as relieving AlliedSignal of its obligation to obtain such formal approval as may be required by this Order.

XVI. INDEMNIFICATION AND INSURANCE

16.1 AlliedSignal shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, agents, employees, contractors and representatives for any and all claims or causes of action arising from or on account of acts or omissions of AlliedSignal, its officers, employees, agents or any persons acting on its behalf or under its control in carrying out response activities pursuant to this Order.

16.2 Neither the State of Michigan nor any of its departments, agencies, officials, agents, employees, contractors or representatives shall be held out as a party to any contract entered into by or on behalf of AlliedSignal in carrying out actions pursuant to this Order. Neither AlliedSignal nor any contractor shall be considered an agent of the State. This Order shall not be construed to be an indemnity by the State for the benefit of AlliedSignal or any other person.

16.3 AlliedSignal waives any and all claims or causes of action against the State of Michigan and its departments, agencies, officials, agents, employees, contractors and representatives for damages, reimbursement, or set-off of any payments made or to be made to the State, that arise from, or on account of, any contract, agreement or arrangement between

AlliedSignal and any person for the performance of response activities at the Facility, including claims on account of construction delays.

16.4 AlliedSignal shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, agents, employees, contractors and representatives for any and all claims or causes of action for damages or reimbursement from the State arising from, or on account of, any contract, agreement or arrangement between AlliedSignal and any person for performance of response activities at the Facility, including claims on account of construction delays.

16.5 Prior to commencing any response activities pursuant to this Order, AlliedSignal shall secure, and maintain for the duration of this Order, comprehensive general liability insurance with limits of one million dollars (\$ 1,000,000), combined single limit, naming the MDEQ, the Attorney General and the State of Michigan as additional insured parties. If AlliedSignal demonstrates by evidence satisfactory to the MDEQ that any contractor or subcontractor maintains insurance equivalent to that described above, then with respect to that contractor or subcontractor, AlliedSignal needs to provide only that portion, if any, of the insurance described above that is not maintained by the contractor or subcontractor. Regardless of the method used to insure, and prior to commencement of response activities pursuant to this Order, AlliedSignal shall provide the MDEQ Project Coordinator and the Attorney General with certificates evidencing said insurance and the MDEQ's, the Attorney General's and the State of Michigan's status as additional insured parties. In addition, for the duration of this Order, AlliedSignal shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of Workers' Disability Compensation Insurance for all persons performing response activities on behalf of AlliedSignal in furtherance of this Order.

XVII. MODIFICATIONS

17.1 This Order may only be modified according to the terms of this Section. Any Submission or attachment to Submissions required by this Order, excluding the RAP, may be modified by written agreement between AlliedSignal's designated Project Coordinator or other authorized representative and the MDEQ's Project Coordinator. The RAP may only be modified by written agreement between AlliedSignal's Project Coordinator and the MDEQ, ERD Division Chief or his or her representative.

17.2 Modification of any other provision of this Order shall be made by written agreement between AlliedSignal's Project Coordinator, the MDEQ, ERD Division Chief, and the Michigan Department of Attorney General.

XVIII. DELAYS IN PERFORMANCE

18.1 AlliedSignal shall perform the requirements of this Order within the time limits established herein, unless performance is prevented or delayed by events that constitute a "Force Majeure." Any delay in the performance attributable to a "Force Majeure" shall not be deemed a violation of AlliedSignal's obligations under this Order in accordance with this Section.

18.2 For the purpose of this Order, "Force Majeure" means an occurrence arising from causes not foreseeable, beyond the control of and without the fault of AlliedSignal, including, but not limited to: an Act of God; untimely review of permit applications or Submissions by the MDEQ or other applicable authority; or acts or omissions of third parties that could not have been avoided or overcome by AlliedSignal's due diligence and that delay the performance of an obligation under this Order. "Force Majeure" does not include, among other things, unanticipated or increased costs, changed financial circumstances, or failure to obtain a permit or license as a result of AlliedSignal's actions or omissions.

18.3 When circumstances occur that AlliedSignal believes constitute a Force Majeure, AlliedSignal shall notify the MDEQ by telephone or telefax within forty-eight (48) hours of discovering the occurrence if that occurrence causes or may cause a delay in AlliedSignal's compliance with any provision of this Order. Verbal notice shall be followed by written notice within ten (10) calendar days and shall describe in detail the anticipated length of the delay; the precise causes of the delay; the measures taken or to be taken by AlliedSignal to avoid, minimize or overcome the delay; and the timetable by which those measures shall be implemented. AlliedSignal shall adopt all reasonable measures to avoid or minimize any such delay. Within thirty (30) days of receipt of written notice from AlliedSignal, the MDEQ will notify AlliedSignal whether the MDEQ agrees that the delay was beyond the control of AlliedSignal.

18.4 Failure of AlliedSignal to comply with the notice requirements of Paragraph 18.3 shall render this Section XVIII void and of no force and effect as to the particular incident involved. The MDEQ may, in its sole discretion and in appropriate circumstances, waive the notice requirements of Paragraph 18.3 of this Order.

18.5 If the parties agree that a delay or anticipated delay was beyond the control of AlliedSignal, this may be so stipulated and this Order will be modified according to the procedure set forth in Section XVII (Modifications). If the parties to this Order are unable to reach such agreement, the dispute shall be resolved in accordance with Section XIX (Dispute Resolution) of this Order. AlliedSignal shall have the burden of proving that any delay was beyond the reasonable control of AlliedSignal and that all the requirements of this Section XVIII have been met by AlliedSignal.

18.6 An extension of one compliance date based upon a particular occurrence does not necessarily mean that AlliedSignal qualifies for an extension of a subsequent compliance date

without demonstrating the need for an extension for each incremental step or other requirement for which an extension is sought.

XIX. DISPUTE RESOLUTION

19.1 The dispute resolution procedures of this Section shall apply without limitation to all provisions of this Order, except where expressly stated otherwise. If AlliedSignal objects to any notice of disapproval, modification or decision concerning a requirement of Sections VII (Implementation of Response Activities), VIII (Financial Assurance Mechanism), IX (Sampling and Analysis), or XV (Submissions and Approvals) of this Order, AlliedSignal shall notify the MDEQ, in writing, of its objections within seven (7) days of receipt of the notice. The MDEQ and AlliedSignal shall have ten (10) days from the receipt by the MDEQ of the notification of objection to reach agreement. If agreement cannot be reached on any issue within this ten (10)-day period, the MDEQ shall provide a written statement of its decision to AlliedSignal and in the absence of initiation of formal dispute resolution by either party under Paragraph 19.2, the MDEQ position shall be binding on AlliedSignal.

19.2 If AlliedSignal and the MDEQ cannot informally resolve a dispute under Paragraph 19.1, AlliedSignal may initiate formal dispute resolution by requesting review of disputed issues by the MDEQ, ERD Division Chief. This written request must be filed with the MDEQ, ERD Division Chief and the MDEQ Project Coordinator within ten (10) business days of receipt by AlliedSignal of the MDEQ statement of decision that is issued as part of the informal dispute resolution process as set forth in Paragraph 19.1. The request shall state the issues in dispute; the relevant facts upon which the dispute is based; any factual data, analysis, or opinion supporting its position; and all supporting documentation on which AlliedSignal relies. The MDEQ shall, within ten (10) business days after receiving the written request for review by the MDEQ, ERD Division Chief, provide a written statement of decision to AlliedSignal, which shall include a statement of its understanding of the issues in dispute; the

relevant facts upon which the dispute is based; any factual data, analysis, or opinion supporting its position; and all supporting documentation upon which the MDEQ has relied in making its decision. The decision of the MDEQ, ERD Division Chief shall be binding on AlliedSignal.

19.3 If AlliedSignal seeks to challenge any decision or notice issued by the MDEQ or the Attorney General under this Order, other than those specified in Paragraph 19.1, AlliedSignal shall send a written notice of objection to both the MDEQ Project Coordinator and the Assistant Attorney General assigned to this matter within ten (10) business days of receipt of the notice or decision by the MDEQ or Attorney General. The MDEQ, Attorney General and AlliedSignal shall have fourteen (14) days from the date of receipt by the MDEQ and Attorney General of the notification of objection to reach an agreement. If agreement cannot be reached on any issue within the fourteen- (14) day period, the MDEQ and the Attorney General shall provide a written statement of its decision to AlliedSignal.

19.4 If AlliedSignal does not comply with the MDEQ decision under Paragraph 19.2 or the MDEQ and Attorney General decision under Paragraph 19.3 within fourteen (14) days of such decision, the Department of Attorney General, on behalf of the MDEQ, may take such civil enforcement actions against AlliedSignal as may be provided for by Sections 20119(4) and 20137(1) of the NREPA and other statutory and equitable authorities, including, but not limited to, the assessment of civil penalties or damages as authorized by law. In such an event, the MDEQ retains the right to perform the necessary response activities and to recover the costs from AlliedSignal. Engagement of a dispute resolution among the parties shall not be cause for AlliedSignal to delay the implementation of any response activity.

19.5 Notwithstanding this Section, AlliedSignal shall pay to the MDEQ that portion of a demand for reimbursement of costs or payment of stipulated penalties that is not subject to dispute resolution procedures in accordance with and in the manner provided in Sections XX (Reimbursement of Costs) and XXI (Stipulated Penalties), as appropriate.

19.6 No action or decision of the MDEQ or the Attorney General shall constitute a final agency action giving rise to any rights of judicial review prior to the Attorney General's initiation of judicial action to compel AlliedSignal to comply with this Order or to enforce a term, condition or other action required by this Order in accordance with Section 20137 of the NREPA. Nothing in this Order shall expand AlliedSignal's ability to obtain pre-enforcement review of this Order.

XX. REIMBURSEMENT OF COSTS

20.1 On the effective date of this Order, AlliedSignal shall pay the MDEQ _____ dollars (\$_____) to resolve all claims for Past Response Activity Costs relating to matters covered in this Order. Payment shall be made pursuant to the provisions of Paragraph 20.5.

20.2 AlliedSignal shall also pay: (a) response activity costs incurred by the State prior to the [Insert the agreed upon date(s): a date picked by parties, the effective date of the Order, or the dates set forth in the attached Final Summary Report (Attachment __)], but not yet paid by the State (and/or) (b) response activity costs which have been incurred but are not accounted for in the attached summary sheet (Attachment __), including staff costs in negotiating and preparing settlement documents with AlliedSignal, overseeing response activities at the Facility prior to execution of this Order, and contractor costs. Said costs shall be documented and included in the first demand for Oversight Costs as set forth in Paragraph 20.3.

20.3 AlliedSignal shall reimburse the State for all Oversight Costs incurred by the State in overseeing the response activities of AlliedSignal for matters covered in this Order. As soon as possible after each anniversary of the effective date of this Order, pursuant to Sections

20119(4) and 20137(1) of the NREPA, the MDEQ will provide AlliedSignal with a written demand for payment of oversight costs that have been lawfully incurred by the State. Any such demand will set forth with reasonable specificity the nature of the costs incurred.

20.4 AlliedSignal shall have the right to request a full and complete accounting of all demands made hereunder, including time sheets, travel vouchers, contracts, invoices, and payment vouchers as may be available to the MDEQ. Provision of these documents to AlliedSignal by the MDEQ may result in the MDEQ incurring additional oversight costs that will be included in the annual demand for payment of Oversight Costs. Except as provided by Section XIX (Dispute Resolution), AlliedSignal shall reimburse the MDEQ for such costs within thirty (30) days of receipt of a written demand from the MDEQ. Interest shall accrue on the unpaid balance at the end of the thirty (30)- day period at the rate provided for in Section 20126a(3) of the NREPA. In any challenge by AlliedSignal to a demand for recovery of costs by the MDEQ, AlliedSignal shall have the burden of establishing that the costs were not lawfully incurred in accordance with Section 20126a(1)(a) of the NREPA.

20.5 All payments made pursuant to this Order shall be by certified check payable to the "State of Michigan - Environmental Response Fund" and shall be sent by first-class mail to the address listed in Section X (Project Coordinators and Communications/Notices). The Former Allied Chemical Corporation Facility, the MDEQ Reference No. AOC-ERD-[yr.]-[#], and the ERD Account Number _____ shall be identified on each check. A copy of the transmittal letter and the check shall be provided simultaneously to the MDEQ Project Coordinator and the Assistant Attorney General in Charge, Department of Attorney General, Natural Resources Division, Suite 315, 300 South Washington Square, Lansing, Michigan 48913. Costs recovered pursuant to this Section shall be deposited in the Environmental Response Fund in accordance with the provisions of Section 20108(3) of the NREPA.

XXI. STIPULATED PENALTIES

21.1 Except as provided by Section XIX (Dispute Resolution) and Section XVIII (Delays in Performance), if AlliedSignal fails or refuses to comply with the following terms or conditions of this Order:

- a) implementation of the MDEQ-approved IRWP in accordance with the approved schedule,
- b) placing a restrictive covenant on the Detroit Coke Property as specified in Paragraph 7.5,
- c) submission or implementation of the MDEQ-approved RI/FS work plan as specified in Paragraph 7.7,
- d) submission of a RAP that is consistent with Part 201 and its administrative rules as specified in Paragraph 7.8,
- e) implementation of the MDEQ-approved RAP as specified in Paragraph 7.7,
- f) establishment and maintenance of a financial assurance mechanism as specified in Section VIII (Financial Assurance Mechanism),
- g) failure to modify the IRWP, RI/FS or RAP or provide necessary plans or implement further response activities as specified in Paragraph 7.14, and
- h) failure to respond to a creation of danger as specified in Section XII.

AlliedSignal shall pay the State stipulated penalties in the following amounts for each day for

every failure or refusal to comply or conform:

<u>Period of Delay</u>	<u>Penalty per Violation per Day</u>
1 st -15 th Day	\$1,000.00
16 th -30 th Day	\$5,000.00
Beyond 30 Days	\$10,000.00

21.2 Except as provided in Paragraph 21.1, AlliedSignal shall pay the MDEQ stipulated penalties of five hundred dollars (\$500.00) per day for each and every failure or refusal to comply with any other term or condition of this Order.

21.3 AlliedSignal shall notify the MDEQ, in writing, of the specific nature and scope of any violation of this Order no later than five (5) days after becoming aware of such violation. Failure to notify the MDEQ as required by this Paragraph constitutes an independent violation of this Order.

21.4 Stipulated penalties shall begin to accrue on the day performance is due, or other failure or refusal to comply occurred, and shall continue to accrue until the day the noncompliance is corrected. Separate penalties shall accrue for each separate failure or refusal to comply with the terms and conditions of this Order. The State may, at their discretion, excuse AlliedSignal from payment of stipulated penalties or a portion thereof.

21.5 Except as provided in Section XIX (Dispute Resolution), AlliedSignal shall pay stipulated penalties owed to the State no later than thirty (30) days after receiving a written demand from the State. Payment shall be made in the manner provided in Paragraph 20.5. Interest shall accrue on the unpaid balance at the end of the thirty (30)-day period at the rate provided for in Section 20126a(3) of the NREPA. Failure to pay the stipulated penalties within thirty (30) days after receipt of a written demand constitutes a further violation of the terms and conditions of this Order.

21.6 The imposition of stipulated penalties is not the State's exclusive remedy in the event that AlliedSignal violates this Order. The State reserves the right to pursue any other remedy or remedies to which it is entitled under this Order or any applicable law for any failure or refusal of AlliedSignal to comply with the requirements of this Order, including, but not limited to, seeking civil penalties, injunctive relief, specific performance, cost reimbursement, exemplary damages in the amount of three (3) times the costs incurred by the State of Michigan as a result of AlliedSignal's violation of or failure to comply with this Order pursuant to Sections 20119(4) and 20137(1) of the NREPA, and sanctions for contempt of court, provided that the stipulated penalties set forth above for a specific violation shall be credited against any such civil penalties for that violation.

XXII. COVENANTS NOT TO SUE BY THE STATE

22.1 In consideration of the actions that will be performed and the payments that will be made by AlliedSignal under the terms of this Order, and except as specifically provided in this Section and Section XXIII (Reservation of Rights by the State), the State of Michigan hereby covenants not to sue or to take further administrative action against AlliedSignal for:

- (a) Performance of the MDEQ-approved response activity by AlliedSignal under this Order;
- (b) Reimbursement of Past Response Activity Costs incurred by the State as set forth in Paragraph 20.1 of this Order; and
- (c) Payment of response activity costs incurred by the State as set forth in Paragraphs 20.2 and 20.3 of this Order.

22.2 The covenants not to sue shall take effect upon the complete and satisfactory performance by AlliedSignal of its obligations under this Order as follows:

(a) With respect to liability for the performance of MDEQ-approved response activities required to be performed under this Order through construction of the remedy, the covenant not to sue shall take effect upon issuance of the Certification of Construction of Remedial Action.

(b) With respect to liability for performance of MDEQ-approved response activities required to be performed under this Order after the issuance of the Certification of Construction of Remedial Action, the covenant not to sue shall take effect upon issuance of the Certification of Completion of the Remedial Action.

(b) With respect to liability for Facility response activity costs incurred by the State, the covenant not to sue shall take effect upon the MDEQ's receipt of payments for those costs.

22.3 These covenants not to sue extend only to AlliedSignal and do not extend to any other person.

XXIII. RESERVATION OF RIGHTS BY THE STATE

23.1 The MDEQ and the Attorney General reserve the right to bring an action against AlliedSignal under federal and state laws for any matters that are not set forth in Paragraph 22.1.

23.2 The State reserves the right to take action against AlliedSignal if it discovers that any information provided by AlliedSignal was intentionally false or misleading.

23.3 The MDEQ and the Attorney General expressly reserve any and all rights and defenses pursuant to any available legal authority that they may have to enforce this Order against AlliedSignal, including the MDEQ's right both to disapprove of response activities performed by AlliedSignal or to require AlliedSignal to perform work in addition to those

detailed in this Order, provided that such work is consistent with the scope of the response activities as defined in Paragraph 7.1 of this Order.

23.4 Notwithstanding any other provision of this Order, the MDEQ retains all authority and reserves all rights to take any and all response activities authorized by law. If the MDEQ determines that AlliedSignal has failed to implement any provisions of this Order, the MDEQ reserves the right to perform, or contract to have performed, any and all portions of the response activities that the MDEQ determines are necessary and to recover response activity costs.

23.5 Failure by the MDEQ or the Attorney General to timely enforce any term, condition or requirement of this Order shall not:

- (a) Provide or be construed to provide a defense for AlliedSignal's noncompliance with any such term, condition or requirement of this Order; or
- (b) Estop or limit the authority of MDEQ or the Attorney General to later enforce any such term, condition or requirement of the Order or to seek any other remedy provided by law.

23.6 The covenant not to sue set forth in Section XXII (Covenant Not to Sue by the State), does not pertain to any matters other than those expressly specified in Paragraph 22.1. The State reserves, and this Order is without prejudice to, all rights against AlliedSignal with respect to all other matters, including, but not limited to, the following:

- (a) liability arising from a violation by AlliedSignal of a requirement of this Order, including any conditions of an approved Submission required herein;
- (b) liability for any other response activities that are required to address environmental contamination at the Facility;
- (c) liability for response activity costs and civil penalties other than those referred to in Section XX (Reimbursement of Costs);

(d) liability arising from the past, present or future treatment, handling, disposal, release or threat of release of hazardous substances outside of the Facility and not attributable to the Facility;

(e) liability arising from the past, present or future treatment, handling, disposal, release or threat of release of hazardous substances taken from the Facility;

(f) liability for damages for injury to, destruction of, or loss of natural resources;

(g) liability for criminal acts;

(h) liability for any matters for which the State is owed indemnification under Section XVI (Indemnification and Insurance) of this Order; and

(i) liability arising from release or threatened release of hazardous substances or violations of federal or state law that occur during or after implementation of the response activities required by this Order.

23.7 The State's Reservations Concerning Post-Certification of Completion of Remedial Action:

Notwithstanding any other provision of this Order, the State reserves, and this Order is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel AlliedSignal to: (a) perform further response activities relating to the Facility or (b) reimburse the State of Michigan for additional costs of response subsequent to issuance of the Certification of Completion of Remedial Action if the following occur:

(i) Conditions at the Facility, previously unknown to the MDEQ, are discovered after the MDEQ's issuance of the Certification of Completion of Remedial Action; or

(ii) Information is received, in whole or in part, after the MDEQ's issuance of the Certification of Completion of Remedial Action; and

(iii) These previously unknown conditions or this information, together with any other relevant information, indicates the remedial action that has been implemented is not protective

of the public health, safety, or welfare, or the environment.

23.8 For purposes of Paragraph 23.7, the information previously received by and the conditions known to the MDEQ shall include only that information and those conditions set forth in the administrative record supporting response activities performed at the Facility and any information received by the MDEQ pursuant to the requirements of this Order prior to the MDEQ's issuance of the Certification of Completion of Remedial Action.

23.9 The parties acknowledge and agree that this Order does not constitute a warranty or representation of any kind by the MDEQ that the response activities performed in accordance herein will result in the achievement of the remedial criteria established by law.

23.10 Notwithstanding any provision of this Order, the MDEQ and the Attorney General shall retain all of their information gathering, inspection, access and enforcement authorities and rights under Part 201 of the NREPA and any other applicable statute or regulation.

23.11 Nothing in this Order shall limit the power and authority of the MDEQ or the State of Michigan to take, direct or order all appropriate action to protect the public health, safety, or welfare, or the environment; or to prevent, abate or minimize a release or threatened release of hazardous substances, pollutants or contaminants on, at or from the Facility.

XXIV. COVENANT NOT TO SUE BY ALLIEDSIGNAL

24.1 AlliedSignal hereby covenants not to sue or take any civil, judicial or administrative action against the State, its agencies, or their authorized representatives, for any claims or causes of action against the State with respect to the Facility arising from this Order, including, but not limited to, any direct or indirect claim for reimbursement from the Cleanup

and Redevelopment Fund pursuant to Section 20119(5) of the NREPA or any other provision of law.

24.2 In any subsequent administrative or judicial proceeding initiated by the Attorney General for injunctive relief, recovery of response activity costs, or other appropriate relief relating to the Facility, AlliedSignal agrees not to assert, and may not and shall not maintain any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting or other defenses that are based upon any contention that the claims raised by the MDEQ or the Attorney General in the subsequent proceeding were or should have been brought in this case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set forth in Section XXII (Covenant Not to Sue by the State).

XXV. CONTRIBUTION PROTECTION

Pursuant to Section 20129(5) of the NREPA and Section 9613(f)(2) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC (CERCLA) and to the extent provided in Section XXII (Covenant Not to Sue by the State), AlliedSignal shall not be liable for claims for contribution for the matters set forth in Paragraph 22.1 of this Order. Entry of this Order does not discharge the liability of any other person that may be liable under Section 20126 of the NREPA, or the CERCLA, 42 USC 9607 and 9613, to the extent allowable by law. Pursuant to Section 20129(9) of the NREPA, any action by AlliedSignal for contribution from any person not a party to this Order shall be subordinate to the rights of the State of Michigan, if the State files an action pursuant to the NREPA or other applicable federal or state law.

XXVI. CERTIFICATIONS

26.1 When AlliedSignal determines that it has completed construction of the remedial action, it shall submit to the MDEQ a draft Notification of Construction of the Remedial Action and a draft Final Report. The draft Final Report shall summarize all response activities performed under this Order. The draft Final Report shall include or reference any supporting documentation.

26.2 Upon receipt of the draft Notification of Construction of the Remedial Action, the MDEQ will review the draft Notification of Construction of the Remedial Action, the draft Final Report, any supporting documentation and the response activities that were performed pursuant to this Order. Within ninety (90) days of receipt of the draft Notification of Construction of the Remedial Action, the MDEQ will determine whether AlliedSignal has satisfactorily completed all requirements for construction of the remedial action, including, but not limited to, completing the response activities associated with the construction of the remedial action required by this Order, paying any and all remaining response activity cost reimbursement and stipulated penalties owed to the MDEQ, and complying with all other terms and conditions of this Order. If the MDEQ determines that all requirements have been satisfied, the MDEQ, ERD Division Chief will so notify AlliedSignal, and upon receipt of a final Final Report in accordance with Section XV (Submissions and Approvals), shall issue a Certification of Construction of the Remedial Action.

26.3 When AlliedSignal determines that it has completed all elements of the remedial action plan, it shall submit to the MDEQ a draft Notification of Completion of the Remedial Action Plan and a draft Final Report. The draft Final Report shall summarize all response activities performed under this Order. The draft Final Report shall include or reference any supporting documentation.

26.4 Upon receipt of the draft Notification of Completion of the Remedial Action, the MDEQ will review the draft Notification of Completion of the Remedial Action, the draft

Final Report, any supporting documentation and the response activities that were performed pursuant to this Order. Within ninety (90) days of receipt of the draft Notification of Completion of the Remedial Action, the MDEQ will determine whether AlliedSignal has satisfactorily completed all requirements of this Order, including, but not limited to, completing the response activities required by this Order, proper plugging and abandonment of monitor wells, paying any and all cost reimbursement, and stipulated penalties owed to the MDEQ, and complying with all other terms and conditions of this Order. If the MDEQ determines that all requirements have been satisfied, the MDEQ, ERD Division Chief will so notify AlliedSignal, and upon receipt of a final Final Report in accordance with Section XV (Submissions and Approvals), shall issue a Certification of Completion of the Remedial Action to AlliedSignal. The Financial Test requirements established pursuant to Section VIII (Financial Assurance Mechanism) may be waived after issuance of the Certification of Completion of the Remedial Action.

XXVII. TERMINATION

Upon completion of all MDEQ-approved response activities required under this Order in connection with the Facility and issuance of a Certification of Completion of the Remedial Action Plan in accordance with Section XXVI (Certifications), AlliedSignal's obligations as set forth in this Order shall automatically terminate, except for the requirements of Paragraph 14.1 regarding record retention.

XXVIII. SEPARATE DOCUMENTS

This Order may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Order may be executed in duplicate original form.

XXIX. SEVERABILITY

The provisions of this Order shall be severable, and if any provision is declared by a court of competent jurisdiction to be inconsistent with federal or state law, and therefore unenforceable, the remaining provisions of this Order shall remain in full force and effect.

XXX. EFFECTIVE DATE

This Order is effective upon Signature of the Director's designee. All dates for the performance of obligations under this Order shall be calculated from the effective date. For the purposes of this Order, the term "day" shall mean a calendar day.

_____, Chief
Environmental Response Division
Michigan Department of Environmental Quality

[Name] [P#]

Assistant Attorney General
Natural Resources Division

IT IS SO AGREED BY:

[Company Name]

Date

[Name and Title of

Company's Authorized Representative]